

Application of effective microorganism (EM) in food waste composting: a review

ABSTRACT

Objective: This paper provides a review on the application of effective microbe (EM) in food waste composting. It emphasized on the application EM in composting method, the EM properties and the quality of compost with EM in terms of nutrient content and heavy metals concentration. **Method:** This paper reviewed all related articles on EM from 2000 to 2014. All of the articles were searched through Sco-pus and Google Scholar search engines using specific keywords related to the topic. **Result:** EM has a great potential to be applied on food waste composting as it can accelerate the composting process and reduce odor during the decomposition of organic material. **Conclusion:** EM has a great potential to be used in accelerating the composting process and increased nutrient in compost. EM controls the temperature and reduces pathogens in the compost to produce good quality of compost. However, detail assessment is needed to assess the effect of EM application on compost quality and the safety for human health.

Keyword: Effective microorganisms; Food waste; Nutrient; Heavy metals; Composting